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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/114,973 07/14/98 DOVE

W 960296.95491

EXAMINER
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HM12/0912

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ART UNIT	PAPER NUMBER
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1633

DATE MAILED:

09/12/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/114,973

Applicant(s)

Dove et al.

Examiner

Janet M. Kerr

Group Art Unit

1633



☒ Responsive to communication(s) filed on Jun 30, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire one month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-25 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-25 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

***Response to Amendment***

Applicants' amendment, filed 4/11/00, and supplemental response, filed 6/30/00, have been entered.

Claims 1-25 remain pending.

Claims 7-9 are directed to a non-elected invention (see Paper Nos. 5 and 7).

Claims 1-6, and 10-25 have been previously examined on the merits (see Paper No. 6). A telephonic interview with Attorney Bennett J. Berson was conducted on 6/29/00 (Paper No. 11), and a personal interview with Applicant William F. Dove and Attorney Bennett J. Berson was conducted on 8/4/00, to discuss and clarify applicants' claimed invention. In view of the nature and complexity of the claimed inventions, it was determined that claims 1-6 and 10-25 were not fully examined commensurate in scope with the claimed inventions and such an examination would require an undue burden given the multiple claimed inventions encompassing distinct products and methods. As such, a new restriction requirement is being submitted to applicants as detailed below.

***Election/Restriction***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a method for identifying a segregating mutation at a genetic locus that modifies an index phenotype in a non-human index inbred strain, the segregating mutation causing an outlying phenotype relative to the index phenotype, classified in class 435, subclass 441, for example.
- II. Claim 10, drawn to a method for identifying a human genetic sequence that corresponds to a segregating mutation at a genetic locus in a non-human animal, the segregating mutation causing an outlying phenotype relative to an index phenotype in an index inbred mouse strain, classified in class 435, subclass 6, for example.
- III. Claims 11-16, drawn to a method for identifying a segregating mutation at a genetic locus that modifies an index phenotype in a non-human index inbred strain,

the segregating mutation causing an outlying phenotype relative to the index phenotype, classified in class 435, subclass 441, for example.

- IV. Claims 17-18, drawn to a genetically altered mouse, classified in class 800, subclass 13, for example.
- V. Claims 19-20, drawn to a non-human animal comprising a segregating mutation that modifies an index phenotype produced by a compact screen method, classified in class 800, subclasses 8 and 9, for example.
- VI. Claims 21-22, drawn to a non-human animal comprising a segregating mutation that modifies an index phenotype produced by using isogenic animals, classified in class 800, subclasses 8 and 9, for example.
- VII. Claims 23-25, drawn to a non-human animal comprising a segregating mutation that modifies an index phenotype prepared by using a cluster method, classified in class 800, subclasses 8 and 9, for example.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-III and IV-VII are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process, such as by transgenic techniques.

Inventions I-III are distinct, each from the other, as the inventions require different technical considerations and starting materials, and have different method steps. For example, the invention of Group I requires the use of a compact screening method with specific breeding crosses which are distinct from the breeding crosses required in the methods of Groups II-III. Similarly, the breeding crosses required to practice the inventions of Group II and III are distinct. Moreover, the inventions have different end results such as identification of segregating mutations (Invention I), identification of mutations following mutagenic treatment (Invention II), and identification of human genetic sequences (Invention III).

Inventions IV-VIII are distinct, each from the other, as the inventions require different technical considerations and starting materials, and have different method steps for producing the distinct claim-designated animals. For example, the animal of Group IV is directed to a genetically altered mouse comprising a congenic dominant heterozygous allele that confers an index phenotype, a segregating modifier of the index phenotype, and a single nucleotide mapping polymorphism genetically linked to a single point mutation. The non-human animals of Inventions V-VII are claimed in product-by-process formats and require different breeding strategies of outcrossings and/or backcrossings to obtain the animals, i.e., different process steps are required to produce the claim-designated non-human animals of Inventions V-VII.

The inventions above have acquired a separate status in the art as a separate subject for inventive effect and require independent searches. The search for each of the above inventions is not co-extensive particularly with regard to the literature search. Further, a reference which would anticipate the invention of one group would not necessarily anticipate or even make obvious another group.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet M. Kerr whose telephone number is (703) 305-4055. Should the

Application/Control Number: 09/114,973  
Art Unit: 1633

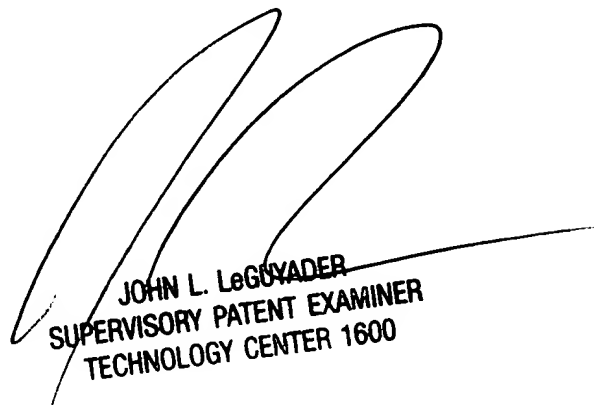
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examiner be unavailable, inquiries should be directed to John LeGuyader, Supervisory Primary Examiner of Art Unit 1633, at (703) 308-0447. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 305-7401. Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is (703) 308-0196.

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1633.



Janet M. Kerr, Ph.D.  
Patent Examiner  
Group 1600



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SUPERVISORY PATENT EXAMINER  
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